

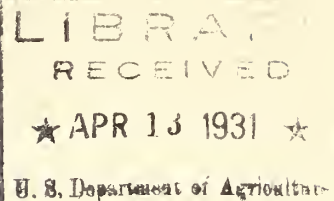
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CEREAL AND FORAGE CROP INSECTS.



A radio talk by Dr. W. H. Larrimer, Bureau of Entomology, United States Department of Agriculture, through Station WRC and 32 other stations associated with the National Broadcasting Company, at 1:00 p.m., E.S.T., Monday, March 30, 1931.

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The season of 1930 will long be remembered by most farmers in the Central and Eastern United States as the year when the weather, the crops, and even the markets were all against them. The activities of a great number of species of insects were doubtless affected by the record drought of 1930 -- some beneficially, some adversely, and in the cases of a great many more there is a question whether they were affected abnormally at all. Those insects which are favored by dry seasons added to the farmer's burden by their unusual abundance and, because of the demoralizing influence of the combination of these unfortunate circumstances, little or no attention was given to the absence of those insect pests usually abundant but which were unfavorably affected by the extreme dry season.

Everyone knows that the yield of most of our crops, from year to year, depends primarily on weather conditions of the current year, but that the amount and quality of seed or growing stock carried over from the previous year are also important. This is true, in very much the same way, in the case of our "crops" of insects. In discussing at this time the insect situation for 1931, I can only tell you about the amount and quality of the seed; you can ask Mr. Kincer of the Weather Bureau whether or not we are going to have another drought in 1931.

With reference to that old timer -- the Corn Earworm -- the parent moths of this species migrate northward each year to produce the crop of earworms that are more or less injurious throughout the Mississippi Valley. There is rarely, if ever, a crop failure of earworms in the South, so that the question of injury from the corn earworm for the coming season depends largely on whether or not the season is favorable. Corn earworms do more damage in years when the growing season is long. Farmers' Bulletin No. 1651 will tell you more about this pest.

Throughout most of the main wheat-growing area of the country, the 1930 drought reduced the abundance of the Hessian Fly. At every stage, including spring, summer, and fall, the weather conditions were against the fly. Consequently, there will be no general outbreak of the Hessian fly this year over any considerable territory. In a few sections, where local rains occurred early last fall -- resulting in a growth of volunteer wheat and where some wheat was sown early -- there may be some correspondingly heavier fly infestation, but in most cases this will be of a local nature. For further information on the Hessian fly, write for Farmers' Bulletin No. 1627.

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Grasshoppers seemed to have profited by the drought of 1930. The hatching period was none too favorable; nevertheless, as the summer advanced, outbreaks of a more or less serious character occurred. There was no widespread demand for control measures but reports of local increase in abundance, reports of damage, and demands for control measures were received from practically all States. If weather conditions should prove favorable during the spring and early summer of 1931, grasshoppers may be expected to occur in outbreak abundance almost anywhere in the country. Control measures -- principally by poison baits -- as described in Farmers' Bulletin No. 747, are very effective.

At the beginning of the season of 1930, the chinch bug was present but was considered as of very little or no menace over most of the drought area. As was to be expected, however, the dry season was very favorable to the development of the chinch bug and injurious abundance built up in time to hasten the loss of crops, probably already doomed from drought, in central Missouri, parts of Illinois, Kansas, and Oklahoma. The past winter has been very favorable to chinch bugs and, except where control measures -- by burning their winter quarters -- have been practiced, much chinch bug injury may be expected in these States during the season of 1931. Farmers' Bulletin 1498 tells how to fight the chinch bug.

Most of you have never heard of the Range Caterpillar. It is regarded as a very serious pest by the stockmen and farmers of the Southwest. When full grown, this caterpillar is about 3" long, as big around as a lead pencil, is covered with long, poisonous spines, and in general is quite a fearsome looking creature. It devastates large areas of range pastures and, at one time, threatened to destroy the livestock industry over an area of 30,000 square miles in New Mexico. Formerly, it fed on range grasses but of late it has changed its feeding habits and attacks many cultivated crops as well. Because of the low per-acre value of range grass, artificial control of the caterpillar is out of the question. However, the last big outbreak was eventually brought under control by natural enemies -- the principal one of which was a small insect -- an egg parasite -- that destroyed the caterpillar eggs by the millions. The caterpillar is now at the crest of another outbreak, while the egg parasite is very, very scarce or absent over most of the area infested. Millions of egg parasites are now being bred artificially and will be distributed over the infested area during the coming season in an effort to speed up the slow and easy-going ways of Nature. This type of control is comparatively new and is being tried against the range caterpillar for the first time. A complete story of this interesting insect pest is available in Department Bulletin 443.

The Corn Borer had a very hard time in the Lake region during the drought of 1930, and where the drought was most severe the borer was hardest hit. The stunted plants and dry season made scouting for new infestation much more difficult than usual. The corn borer moths were not normally active and consequently very little spread was observed for the season. Egg-laying was reduced and many eggs dried up or fell off the plants, and the infant

mortality among the young borers was far above normal. The resulting infestation was such that the situation in general is slightly better than at the close of the season of 1926. This is largely just our good fortune and, lest the present more or less complacent attitude toward the corn borer develop into downright indifference, it should be remembered that, with only a moderately favorable season and in spite of a large-scale clean-up campaign, the corn borer increased in abundance and even caused some damage in 1927. If 1931 has a favorable season, the corn borer situation may well be anticipated with considerable misgiving. There are several good bulletins available on the corn borer. For general information, ask for Farmers' Bulletin No. 1548. For control by machinery, the husker-shredder, the low-cut harvester, or the stalk-shaver, ask for Circular 132, Farmers' Bulletin No. 1589, and Miscellaneous Publications 56 and 69, which treat on these subjects respectively.

And so on down the list of hundreds of insect pests of field crops. While only a few can be discussed, information is available on many more. Write to the Bureau of Entomology, United States Department of Agriculture, Washington, D. C., for information on any specific insect or for Farmers' Bulletin No. 835 which will tell you how to detect outbreaks of insects and save the grain crops.

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